Carbon Offsets and Standards

SB 1383 Subgroup #1: Fostering Markets for Non-Digester Projects
Sacramento, CA
May 21, 2018

Carbon Offset Registries / Programs

Primary roles:

- **Develop and approve environmentally rigorous carbon offset accounting standards & methodologies**
- Review and register GHG emissions reduction/removal projects
- Oversee independent validation and verification by accredited entities
- Issue serialized offsets
- Transparently track credit transactions and retirements




Carbon Offset Standard

Developed to:

- Establish infrastructure for market activity
- Ensure environmental integrity of offsets
- Create confidence in the environmental and scientific legitimacy of carbon offsets
- Provide requirements and specifications for:
  - quantification, monitoring, reporting of project-based GHG emissions reductions/removals
  - verification
  - project registration
  - issuance

A carbon offset is…

- 1 metric tonne of CO_2-e emission reductions or removals from an unregulated source
- Real; additional; permanent; free from leakage, quantified, monitored and reported; not double counted or claimed
- Verified by accredited independent 3rd party
- Serialized with a vintage year, registered and tracked
- SALABLE, FUNGIBLE ENVIRNMENTAL ASSET

Standard Requirements: Principles

Table 1: Core GHG Accounting Principles

RELEVANCE	Select the GHG sources, GHG sinks, GHG reservoirs, data, and methodologies appropriate to the needs of the intended user.
COMPLETENESS	Include all relevant GHG emissions and removals. Include all relevant information to support criteria and procedures.
CONSISTENCY	Enable meaningful comparisons in GHG-related information. Use consistent methodologies for meaningful comparisons of emissions over time. Transparently document any changes to the data, boundary, methods, or any other relevant factors.
ACCURACY	Reduce bias and uncertainties as far as is practical.
TRANSPARENCY	Disclose sufficient and appropriate GHG-related information to allow intended users to make decisions with reasonable confidence. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.
CONSERVATIVENESS	Use conservative assumptions, values, and procedures to ensure that GHG emission reductions or removal enhancements are not overestimated.

Standard Requirements: Eligibility Criteria

ACR CRITERIA
• Start Date
• Minimum Project Term
• Crediting Period
• Real
• Emission or Removal Origin
• Offset Title
• Additional
• Regulatory Compliance
• Permanent
• Net of Leakage
• Independently Validated
• Independently Verified
• Environmental and Community Safeguards

Additionality

GHG emission reductions and removals are surplus to the "business as usual" scenario.

Either:

1. pass a three-pronged additionality test
    1. Regulatory surplus
    2. Common practice
    3. Implementation barrier (Financial, Technology; Institutional)
2. exceed an approved performance standard, as defined in the applicable methodology, and regulatory surplus

The approved method for determining additionality is specified in each methodology.

Performance Standard Approach

- **Practice-Based:** evaluating the adoption rates or penetration levels of a particular practice in a relevant industry, sector, or sub-sector.
- **Technology Standard:** Installation of a particular GHG-reducing technology may be determined to be sufficiently uncommon that simply installing the technology is considered additional.
- **Emissions Rate or Benchmark:** per unit of output (e.g., tons of CO_2e emissions); assign an emission rate that characterizes the industry, sector, subsector, or typical land management regime.

- Based on robust, primary data sources that are publicly available
- Industry analysis
- Vetted at methodology level (ACR expert peer review)
- Highly dependent on industry, project type; geography; not tie single threshold to all project types
- Need to consider predicted rate of change

Permanence and Reversal Risk Mitigation

- Permanence ≠ minimum term
  - ACR minimum term requirement is 40 years for terrestrial sequestration
- Intentional reversals versus unintentional reversals
- Risk assessment requirement
  - ACR Tool: financial risk, project management risk, social and political risk, conservation easement deduction, and natural disaster risks
- Effective mitigation of reversal risk provides fungibility for impermanent offsets with other permanent offsets
  - ACR Legally binding AFOLU Reversal Risk Mitigation Agreement and Buffer Pool Terms and Conditions: dictates requirements for a Buffer Pool contribution (Proponent contributes offsets to pool based on project-specific risk assessment)

Thank You!

Lauren Nichols, Technical Manager

lnichols@winrock.org

(571) 402-4816